## IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

DYSON TECHNOLOGY LIMITED and DYSON, INC.	)
Plaintiffs, v.	) ) No. C.A. 05-434-GMS
MAYTAG CORPORATION,	)
Defendant.	)

## PLAINTIFFS' REPLY BRIEF IN SUPPORT OF THEIR MOTION FOR A PRELIMINARY INJUNCTION

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All of the requirements for a preliminary injunction are satisfied here. Nothing in Maytag's answering papers shows otherwise.

Dyson has made a clear showing of a strong likelihood of success on the merits with regard to both validity and infringement. Maytag does not challenge the validity or enforceability of the '515, '748 and '008 Patents. And, although it argues that certain claims of the '038 Patent are invalid, Maytag does not argue invalidity for two other claims of that patent. Moreover, Maytag does not dispute that its Hoover Fusion vacuum cleaner has almost all of the elements of the patent claims at issue. Its attempt to show that just a few elements of the patents-in-suit do not read on the Fusion is without merit.

Because Dyson has made a clear showing of validity and infringement, irreparable harm is presumed as a matter of law. Even apart from this presumption, Dyson has satisfied its burden of showing irreparable harm. If Maytag's infringement is permitted to continue, the irreversible market effects of that infringement will not be fully compensable in money.

The balance of harms likewise favors granting this motion. Maytag will suffer little or no harm from a preliminary injunction. Maytag's annual revenues (even before its recently announced merger with Whirlpool) are measured in the many billions of dollars, and the Hoover Fusion is only one of more than 60 vacuum cleaner models sold by Maytag. Unlike Maytag, which has an enormous home appliance business, Dyson sells only vacuum cleaners in the United States, and its recent success in this country would be jeopardized absent a preliminary injunction.

Lastly, the issuance of a preliminary injunction is in the public interest. The public's substantial interest in enforcing valid United States patents is well established, and enjoining only one vacuum cleaner model sold in the United States-among hundreds, including Maytag's other 60 or more models-will have no adverse impact on the public.

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#### ARGUMENT

- I. There Is a Strong Likelihood of Success on the Merits.
  - A. The Patents-In-Suit Are Valid.
    - Maytag Has Not Challenged the Validity or Enforceability 1. of the '515, '748 and '008 Patents.

Maytag does not challenge the validity or enforceability of the '515, '748 or '008 Patents. On this motion, those three patents are therefore presumed valid. 35 U.S.C. § 282; Purdue Pharma L.P. v. Boehringer Ingelheim, 237 F.3d 1359, 1365 (Fed. Cir. 2001) ("Every patent is presumed valid, so if [defendant] fails to identify any persuasive evidence of invalidity, the very existence of the patent satisfies [plaintiff's] burden on validity.").

> 2. Maytag Has Not Challenged the Validity of the '038 Patent as a Whole.

With respect to the '038 Patent, Maytag challenges the validity of only claim nos. 1, 2, 3 and 7. Maytag Br. at 15. Because Dyson has also accused the Fusion of infringing claim nos. 13 and 14 of the '038 Patent, and in order to limit the number of issues before the Court, Dyson here withdraws—for purposes only of this motion—its claim of infringement of claim nos. 1, 2, 3 and 7. This will minimize the burden on this Court and thereby assist in allowing an early decision on this motion—something of great importance to Dyson in view of the irreparable injury it faces in the marketplace.

Claim nos. 13 and 14 of the '038 Patent, the validity of which Maytag does not challenge, contain additional elements not present in the prior art on which Maytag relies in challenging the other infringed claims. It is well-settled that a claim of invalidity affects only the specific claim or claims found to be anticipated or obvious. Preemption Devices, Inc. v. Minnesota Mining & Mfg. Co., 732 F.2d 903, 907 (Fed Cir. 1984); HCC, Inc. v. R H & M Machine Co., 39 F. Supp. 2d 317, 322-23 (S.D.N.Y. 1999). The fact that claim nos. 13 and 14 are dependent on claim no. 3 is of no consequence. Every claim is "presumed valid,

even though dependent upon an invalid claim." 35 U.S.C. § 282. Each claim must be evaluated individually. *Ortho Pharm. Corp.* v. *Smith*, 959 F.2d 936, 942 (Fed. Cir. 1992); see also Rosco, Inc. v. Mirror Lite Co., 304 F.3d 1373, 1379-80 (Fed. Cir. 2002). Thus, because Maytag does not argue that claim nos. 13 and 14 are invalid, if the other requirements for a preliminary injunction are shown, an injunction against infringement of those claims of the '038 Patent should issue.

## 3. There Was No Inequitable Conduct in Obtaining the '038 Patent.

Maytag contends that the '038 Patent is unenforceable because, at the time of the prosecution of that patent, Dyson knew that there was prior art that had "a 'distance between the cone opening and the base surface' of 61.3 mm, lying well within the range of 'between 30 mm and 70 mm,' as recited in the claim." Maytag Br. at 14-15. At the preliminary injunction stage, a patentee may prevail against a charge of inequitable conduct "by showing that a defendant's evidence of inequitable conduct would not likely carry the day clearly and convincingly at trial." *CVI/Beta Ventures, Inc.* v. *Custom Optical Frames, Inc.*, 893 F. Supp. 508, 515 (D. Md. 1995). Here, it is clear that Maytag will not be able to "carry the day clearly and convincingly."

To establish inequitable conduct, a party must show "affirmative misrepresentations of a material fact, failure to disclose material information, or submission of false material information, coupled with an *intent to deceive*." *Purdue Pharma*, 237 F.3d at 1366 (emphasis added). Maytag never contends in its answering papers that Dyson, or any person prosecuting the patent application, acted with an intent to deceive. Nor does Maytag present any facts that might support any wrongful intent contention. Even if the prior art to which Maytag refers was material, "materiality does not presume intent, [which] is a separate and essential component of inequitable conduct." *Braun, Inc.* v. *Dynamics Corp. of Am.*, 975

F.2d 815, 822 (Fed. Cir. 1992) (rejecting defendant's claim that "intent to deceive may be inferred solely from [plaintiffs'] failure to present to the PTO material prior art of which it was aware."). By omitting any assertion of intent, Maytag fails even to raise properly any inequitable conduct defense.

Moreover, the duty to disclose information rests on individuals, not corporate entities. "Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office . . . ." 37 C.F.R. § 1.56. Maytag here identifies no individual who failed to fulfill his or her duty of candor and good faith. This too makes Maytag's argument unworthy even of consideration on this motion. See Sun Microsystems, Inc. v. Dataram Corp., No. 96-20708, 1997 WL 50272, at \*4 (N.D. Cal. Feb. 4, 1997).

#### B. Maytag's Hoover Fusion Infringes the Patents-in-Suit.

Gareth Jones, an engineer who spent several years designing and developing cyclonic vacuum cleaners, examined and tested the Hoover Fusion in July, and concluded that it infringes at least one claim of each of the four patents-in-suit. Affidavit of Gareth Evan Lyn Jones, sworn to July 25, 2005 ("Jones Aff."), ¶¶ 3-10 (A81-85). In response, Maytag has submitted an affidavit from Charles DeGraff, which fails to assert that Mr. DeGraff has any experience with cyclonic vacuum cleaners. *See* Affidavit of Charles D. DeGraff, sworn to August 25, 2005 ("DeGraff Aff."). Significantly, this affidavit fails to dispute the vast majority of Mr. Jones's conclusions. Moreover, Mr. DeGraff's contentions—which are limited to just a few elements of the patents-in-suit—are demonstrably without merit. Reply Affidavit of Gareth Evan Lyn Jones, sworn to September 15, 2005 ("Jones Reply Aff."), ¶ 2 (C16). A chart listing the relevant elements and the parties' positions on those elements is contained in the Appendix accompanying this brief.

#### 1. The '515 Patent

Mr. DeGraff erroneously asserts that four of the elements of claim no. 14 of the '515 Patent are absent from the Hoover Fusion.

a. Mr. DeGraff contends that the Hoover Fusion's dirty air inlet is not "at an upper portion of the outer container spaced from the bottom" as required by the claim.

DeGraff Aff. ¶ 7 (MAPP043). He reaches this conclusion by arguing that (a) the words "upper portion" must mean the very "top" of the outer container, as depicted in Figure 1 of the '515 Patent, and (b) the Hoover Fusion's dirty air inlet is at a position 41% from the top of the outer container. DeGraff Aff. ¶ 8 (MAPP043). Both of these assertions are incorrect.

As used in claim no. 14, the words "upper portion of the outer container" mean just what they say—that the dirty air inlet must be at the upper portion, i.e., above the midline of the outer container—which Mr. DeGraff concedes is the case here. Jones Reply Aff. ¶ 7 (C18). Rewriting the claim to have "upper portion" mean the very "top" of the outer container is entirely unjustified. See Intervet Am., Inc. v. Kee-Vet Labs., Inc., 887 F.2d 1050, 1053 (Fed. Cir. 1989) ("interpreting what is meant by a word in a claim 'is not to be confused with adding an extraneous limitation appearing in the specification, which is improper."). Maytag's narrow construction is an improper attempt to restrict the clear language of the claim to cover only the features of the preferred embodiment shown in Figure 1 of the '515 Patent. See Gart v. Logitech, Inc., 254 F.3d 1334, 1342 (Fed. Cir. 2001) ("T]hese drawings only [] depict the preferred embodiment [and] are not meant to represent 'the' invention or to limit the scope of coverage defined by the words used in the claims themselves."). "[O]ne of the cardinal sins of patent law [is to read] a limitation from the written description into the claims." Phillips v. AWH Corp., 415 F.3d 1303, 1320 (Fed. Cir. 2005) (en banc). Moreover, the patent specifications elsewhere refer to the "top" of the outer container (see, e.g., col. 5, l. 3; col. 6, l. 8) and the "top" of other components (see, e.g., col. 5, ll. 17-18; col 6, ll. 46-47).

That such a reference was not included in this claim element should be deemed purposeful. *Phillips*, 415 F.3d at 1315. Similarly, the very same claim uses the term "upper end" rather than "upper portion." When two different terms are used in the same claim, they are presumed to have different meanings. *Tate Access Floors, Inc.* v. *Interface Architectural Resources, Inc.*, 279 F.3d 1357, 1370 (Fed. Cir. 2002).

In addition, the dirty air inlet on the Hoover Fusion is closer to the "top" of the outer container than Mr. DeGraff states. Because the purpose of the outer container is to enclose a volume, the "top" of the container is the uppermost portion that actually encloses the volume. Jones Reply Aff. ¶ 8 (C18). As shown in Exhibit 30 to the Jones Reply Affidavit, this point on the Fusion is where the rubber seal on the component containing the shroud touches the inner surface of the container and encloses the volume in the container. (C32) The Hoover Fusion's dirty air inlet is only about 30.7% from this point of the container. Jones Reply Aff. ¶ 8 (C18).

b. Mr. DeGraff states that the Hoover Fusion's dirty air inlet is not "oriented for supplying dirt laden air into the container tangentially to the interior surface of the outer container" because it does not "cause" the air to flow tangentially into the interior surface of the container. DeGraff Aff. ¶¶ 9-10 (MAPP043). This is a complete misreading of the claim language. Once again, Maytag is improperly attempting to read into the claim words that are not there. *Gart*, 254 F.3d at 1339; *Intervet*, 887 F.2d at 1053. The dirty air inlet must be "oriented" for supplying tangential air flow; the claim does not say that the inlet must "cause" the tangential airflow. Jones Reply Aff. ¶9 (C19). The dirty air inlet of the Hoover Fusion is so "oriented." *Id.* As the photographs in Exhibit 31 to the Jones Reply Affidavit make clear, the dirty air inlet has a tear-drop shape that allows for tangential air flow to the interior surface of the outer container. (C33) Mr. DeGraff does not dispute this fact. Nor

does he dispute Mr. Jones's conclusion that the purpose of this shape is to allow air to flow tangentially to the interior surface of the outer container. *See* Jones Aff. ¶¶ 22-23 (A90).

c. Mr. DeGraff asserts that the Hoover Fusion does not have a "cyclone for receiving an air flow from the air inlet and for maintaining its velocity to a cone opening" because "the Fusion vacuum cleaner does not maintain the velocity of the air, but accelerates it." DeGraff Aff. ¶¶ 11-12 (MAPP044). The words "maintaining its velocity" do not mean, as Mr. DeGraff asserts, that the air flow must remain at a constant speed. Jones Reply Aff. ¶ 10 (C20). Indeed, if Mr. DeGraff's construction were accepted, the language would not even cover the preferred embodiments of the '515 Patent or any of the other patents-in-suit. In each of those preferred embodiments, the air accelerates as it flows through the inner, conical cyclone. Id. The '515 patent specification uses "maintaining" to describe the air flow in a conical cyclone (col. 2, l. 44; col. 3, I. 15) and describes such a cyclone as "serving to increase the velocity of the dirt particles" (col. 4, ll. 9-10) or creating "greater dust particle velocity" (col. 8, l. 3). A construction resulting in a preferred embodiment falling outside the scope of a patent "is rarely, if ever, correct" and "require[s] highly persuasive evidentiary support." Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1583 (Fed. Cir. 1996). The evidence here wholly supports Dyson.

d. Mr. DeGraff contends that the diameter at the end of the Hoover Fusion's dirt receiving chamber furthest from the cone opening is not "a minimum . . . of 3 times the diameter of the cone opening," as required by claim no. 14. DeGraff Aff. ¶¶ 14-17 (MAPP044-045). This contention also is erroneous. The diameter of the dirt collection chamber furthest from the cone opening is that located on the rubber-like portion of the chamber that touches the bottom of the container, and that diameter is about 3.11 times the

diameter of the cone opening. Jones Aff. ¶ 34 (A97); Jones Reply Aff. ¶ 11 (C20). Mr. DeGraff states that this rubber-like portion of the dirt collection chamber is not part of the dirt collection chamber, but rather a separate component of the Hoover Fusion that acts as the "ring seal." DeGraff Aff. ¶ 17 (MAPP045). But the rubber-like material is glued tight to the plastic portion of the dirt collection chamber, forming one vacuum cleaner component that is not separable or intended to be separate. Jones Reply Aff. ¶ 11 (C20). The fact that this portion of the dirt collection chamber also may perform the function of the ring seal is of no consequence. See Toro Co. v. White Consolidated Indus., Inc., 266 F.3d 1367, 1370 (Fed. Cir. 2001) (infringement may still exist where the accused device simply uses a different number of components to achieve the same function). Moreover, even if the relevant diameter of the receiving chamber is viewed as the end of the plastic portion of the chamber—and not the rubber-like extension—that diameter is 2.97 times the diameter of the cone opening, which rounded to the nearest tenth is still 3 times the diameter of the cone opening. Jones Aff. ¶ 34 (A97); Jones Reply Aff. ¶ 11 (C21). See San Huan New Materials High Tech, Inc. v. International Trade Comm'n, 161 F.3d 1347, 1361 (Fed. Cir. 1998) (permitting rounding to the nearest integer to determine whether claim limit met).

Mr. DeGraff states that this diameter is "2.9 times the diameter of the cone opening." DeGraff Aff. ¶ 15. Because he carried out his calculation only to one decimal place and not two, it is unclear if his measurement truly differs from that taken by Mr. Jones. If there is a difference, as Mr. Jones explains in his reply affidavit, it may be attributable to the methodology and equipment employed by Mr. DeGraff—or whomever conducted the measurements. Jones Reply Aff. ¶ 11 (C21). Mr. Jones's measurements were taken using sophisticated equipment providing precise measurements. *Id.* In contrast, the DeGraff Affidavit does not disclose, what procedures or equipment were used to obtain the measurements, who conducted the measurements, where the vacuum cleaner parts used for the measurements came from, or what the measurements represent. Jones Reply Aff. ¶ 4-5 (C16-17).

#### 2. The '748 Patent

Mr. DeGraff erroneously contends that four of the elements of claim no. 15 of the '748 Patent are missing in the Hoover Fusion. DeGraff Aff. ¶ 18 (MAPP045). Mr. DeGraff does not dispute that three of those four elements are the same or materially the same as the first three elements discussed above in connection with claim no. 14 of the '515 Patent. DeGraff Aff. ¶¶ 19-25 (MAPP045-046); Jones Reply Aff. ¶ 14 (C22). As shown above (at pp. 5-7) and in more detail in the Jones Reply Affidavit (¶¶ 7-10) (C17-20), all three of these elements are present.

The fourth element challenged by Mr. DeGraff is that there be a disc "provided on the outside of the [inner] cyclone intermediate the receiving chamber and the air outlet of the [outer] container." DeGraff Aff. ¶¶ 26-27 (MAPP046). According to Mr. DeGraff, the Fusion's disc "is not on the outside of the cyclone, but is secured about an upper portion of the receiving chamber." *Id.* ¶ 27 (MAPP046). This statement is incorrect. As the photograph attached as Exhibit 32 to the Jones Reply Affidavit illustrates, the inside diameter of the disc surrounds and touches the outer surface of the inner cyclone and is affixed to it by the same screws that secure the disc to the shroud. Jones Reply Aff. ¶ 15 (C22).

Mr. DeGraff also claims that the disc is not "intermediate" the dirt receiving chamber and the air outlet of the container (here, the shroud) if, "consistent with common usage, 'intermediate' means 'in the middle.'" DeGraff Aff. ¶ 27 (MAPP046). But "intermediate" commonly may refer to any position between two extremes. *See, e.g.*, Random House Webster's Unabridged Dictionary (2d ed. 2001) (defining "intermediate" in the preferred definition to mean "being, situated, or acting between to points, stages, things, persons, etc."); Webster's Third New Int'l Dictionary of the English Language Unabridged 1180 (2002) (defining "intermediate" in the preferred definition to mean, among other things, "between extremes or limits" or "coming or done in between"). "Intermediate" here—as Mr.

DeGraff apparently agrees with respect to claim no. 1 of the '008 Patent—means "between," not "in the middle." Jones Reply Aff. ¶ 15 (C22-23). Maytag argues that Figure 1 of the '748 Patent and unspecified language of "the associated specification" support its "in the middle" construction. Maytag Br. at 10. But there is simply no language in the '748 Patent specification that either describes or requires that the disc be "in the middle" or at the midpoint between the receiving chamber and the cyclone air outlet. Even if there were, that would not support Maytag's construction. It is simply not proper to import a limitation from the preferred embodiment into the claim language. *Phillips*, 415 F.3d at 1320. In any event, this point is academic because the Hoover Fusion's disc is not only between the air outlet (or shroud) and the dirt receiving chamber, but also in the middle of those two components.

Jones Reply Aff. ¶ 15 (C23). The photograph attached as Exhibit 33 to the Jones Reply Affidavit shows that the disc sits in the middle of and touches these two components. (C35)

#### 3. The '008 Patent

Mr. DeGraff asserts that six elements of claim no. 1 of the '008 Patent are missing in the Hoover Fusion. DeGraff Aff. ¶¶ 28-35 (MAPP046-048). Two elements are materially the same, for present purposes, as two elements of claim no. 14 of the '515 Patent discussed above. (These are the elements referred to as Elements 14.3 and 14.8 in Mr. Jones's initial affidavit. *See* Jones Aff. ¶¶ 22-23 & 28 (A90; A93).) We have shown (at pp. 6-7) that Mr. DeGraff is incorrect as to those elements.

The third supposedly missing element is that the shroud be positioned below the air inlet to the cone-shaped cyclone. DeGraff Aff. ¶ 31 (MAPP047). Mr. DeGraff contends that "the upper end of the shroud in the Fusion vacuum cleaner is above the top of

The Hoover Fusion also infringes claim nos. 16 and 17 of the '748 Patent. Jones Aff. ¶¶ 50-53 (A104-105). Both of these claims are directly or indirectly dependent on claim no. 15 of the '748 Patent, and Mr. DeGraff offers no argument for non-infringement other than those (dealt with above) that apply to claim 15.

the cyclone by at least 3/16 inch and, accordingly, above the air inlet to the cyclone." *Id.*Mr. DeGraff is way off the mark here because he appears to include as part of the shroud the portion of the plastic component which is situated above the shroud and surrounds the air inlet to the inner cyclone. Jones Reply Aff. ¶ 19 (C24). In light of the patent specification, the shroud described in claim no. 1 of the '008 Patent is only the perforated portion of the plastic component that surrounds the outside surface of the inner cyclone, which is below the air inlet to the inner cyclone. *Id.* Mr. DeGraff does not dispute that the shroud in this patent acts like a screen in order to prevent larger, lightweight fibrous material from escaping the outer container and clogging the inlet to the inner cyclone. *See* Jones Aff. ¶ 15(A86); Dyson Aff. ¶ 29 (A18). The only portion of the plastic component that performs this screening function is the portion that contains the perforations. Jones Reply Aff. ¶ 19 (C25). The shroud location—below the air inlet—is shown on the photograph attached as Exhibit 34 to the Jones Reply Affidavit. (C36)

The fourth element claimed to be missing is that the shroud have "perforations adjacent to the position intermediate to the cone opening"—which is the end of the shroud closest to the cone opening. DeGraff Aff. ¶ 33 (MAPP047). Mr. DeGraff claims that the perforations on the Hoover Fusion's shroud are not "adjacent" this end of the shroud, but rather "are spaced approximately an inch away from such location." *Id.* This is incorrect for two reasons. First, although the '008 Patent specification states that "[i]t has been found that having the perforations 30f *immediately adjacent* the disc 30b provides an advantage in separation" (col. 3, Il. 57-59 (emphasis added)), the claim element is broader—requiring only that the perforations be "adjacent," *i.e.*, near the position intermediate the cone opening.

Jones Reply Aff. ¶ 20 (C25). The word "immediately" is not present in the claim, and cannot properly be read into it. *See Phillips*, 415 F.3d at 1320; *Gart*, 254 F.3d at 1339. Second, the perforations on the shroud are in fact less than one-half an inch (about 0.43 inches) from this

location. Jones Reply Aff. ¶ 20 (C25). This location is "adjacent" the end of the shroud closest to the cone opening. *Id*.

The fifth element supposedly absent from the Fusion is the requirement of a "dis[c] means provided on the shroud means." DeGraff Aff. ¶ 34 (MAPP047). Mr. DeGraff asserts that the words "provided on" require that the disc and shroud be one integral component. Id. Once again, Maytag is improperly attempting to read into the claim words that are not there. Gart, 254 F.3d at 1339; Intervet Am., 887 F.2d at 1053. Nothing in the patent requires that the disc and shroud be one component, and the patent specification makes clear that the words "provided on" simply require that the disc be attached to the bottom of the shroud, which it is on the accused product. Jones Reply Aff. ¶ 21 (C26) & Exhibit 35 (C37). Contrary to Mr. DeGraff's assertion (¶ 34), the references in the patent description to the "combined" disc and shroud of the '008 Patent, rather than the "separate" disc and shroud of the '748 Patent (see col. 1, ll. 24-30), do not relate to whether the disc and shroud are "separate" components but to whether the disc and shroud are "separate" in terms of distance from one another. Jones Reply Aff. ¶ 21 (C26). Figure 1 of the '748 Patent, reprinted at ¶ 21 of the Jones Reply Affidavit, shows that the disc is not touching the bottom of the shroud but is located some distance below it. In contrast, Figure 2 of the '008 Patent shows that the disc and shroud are "combined" in the sense that they now touch. As Mr. Jones notes, "[i]t is specious . . . to differentiate between a disc and shroud that are molded together and a disc and shroud attached together by screws (as is the case here)." Id.

The sixth supposedly absent element is that the disc be "at a lower longitudinal extent of the shroud means and the air inlet of the cyclone." Mr. DeGraff contends that the Fusion's disc "is well beyond the lower longitudinal extent of the shroud, and even further beyond the recited air inlet." DeGraff Aff. ¶ 35 (MAPP048). This conclusion is based on Mr. DeGraff's erroneous contention that the patent claim mandates

that the disc be integral with the shroud. As shown above, that is not a requirement. The claim element is met if the air inlet is above the shroud (col. 4, II. 35-36), and the disc is at a lower longitudinal extent of the shroud (col. 4, II. 46-48). Jones Reply Aff. ¶ 22 (C27). That is the case on the Fusion. The photograph in Exhibit 33 to the Jones Reply Affidavit (C35) shows that the disc on the Fusion is as close to the shroud and the air inlet (located above the shroud) as is possible; the disc touches the bottom of the shroud. *Id.* (C27)<sup>3</sup>

#### 4. The '038 Patent

As set forth above, Dyson now seeks an injunction for infringement only of claim nos. 13 and 14 of the '038 Patent. Those claims are dependent on claim no. 1 of the '038 Patent, and one element of that claim—the distance between the cone opening and the base surface—is disputed by Maytag and thus still relevant here.<sup>4</sup>

Mr. DeGraff asserts that the elements of claim no. 1 are absent because the distance between the cone opening and the base surface of the Hoover Fusion is 72.2 mm, which is not "less than 8 mm or between 30 mm and 70 mm." DeGraff Aff. ¶¶ 38-39 (MAPP048). Mr. DeGraff provides no explanation whatsoever as to how he arrived at that figure or even who conducted the measurement or when. In fact, the distance—measured with sophisticated and highly precise machinery—is 70.82 mm, not 72.2 mm. Jones Reply Aff. ¶ 27 (C28). Moreover, Mr. DeGraff does not dispute that the accused device performs

The Fusion also infringes other claims of the '008 Patent. It infringes claim nos. 2, 3, 7 and 11 of the '008 Patent, which are dependent on claim no. 1 of that patent. Jones Aff. ¶¶ 68-75 (A111-113). Other than the incorrect views he has expressed as to claim no. 1, Mr. DeGraff does not dispute that the Fusion has all the other elements of these claims. The elements of claim nos. 23, 24 and 25 of the '008 Patent are the same or materially the same as the elements of claim nos. 1, 2 and 3. Thus, as shown above and in Mr. Jones's affidavits (Jones Aff. ¶¶ 56-71 & 76 (A107-113); Jones Reply Aff. ¶¶ 17-23 (C24-28)), the Hoover Fusion also infringes those claims.

Mr. DeGraff does not dispute that the Hoover Fusion contains the elements of claim nos. 2 and 3 of the '038 Patent. These claims therefore pose no impediment to finding infringement of claim nos. 13 and 14.

substantially the same function in substantially the same way to achieve substantially the same result as the claim element, and thus is the substantial equivalent of that element. Jones Aff. ¶ 83 (A115-116); Jones Reply Aff. ¶ 27 (C29).

Mr. DeGraff argues that the range cited in claim no. 1 should be strictly construed because "the examiner... objected to use of the word 'substantially,' throughout the claims." DeGraff Aff. ¶ 40 (MAPP048-049). This is wrong. The examiner objected to use of the word "substantially" in connection with specific pinpoint measurements, e.g., "substantially 54 mm," expressed in certain other claims of the original patent application. See "Selections from '038 Patent Prosecution History," in Maytag's Appendix at MAPP077. Where amendments to a patent application are directed to certain specified claims, the amendments only affect the scope of those claims. Johnson Worldwide Assocs., Inc. v. Zebco Corp., 175 F.3d 985, 992 (Fed. Cir. 1999). The examiner never objected to use of the word "substantially" with respect to claim no. 1. Jones Reply Aff. ¶ 28 (C29). In fact, that word was never in the original or any subsequent version of claim no. 1 in the application for the '038 Patent. Id. The doctrine of prosecution history estoppel thus has no application to this claim limitation because it was never narrowed during prosecution. Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 344 F.3d 1359, 1366 (Fed. Cir. 2003) ("If the amendment was not narrowing, then prosecution history estoppel does not apply.").

Finally, Mr. DeGraff states that the "upwardly extending annular wall from the base surface" in claim nos. 13 and 14 of the '038 Patent is absent from the Fusion. DeGraff Aff. ¶ 43 (MAPP049). According to him, "[t]o the extent that the Fusion vacuum cleaner has a collector with a base surface, any wall associated with the collector is outside of that base surface." Id. This is incorrect. As the diagram attached as Exhibit 29 to Mr. Jones's prior affidavit illustrates, the Hoover Fusion has an annular wall that clearly extends upwardly from the base surface of the outer container. Jones Reply Aff. ¶ 29 (C30).

# II. The Other Relevant Factors Also Weigh Strongly in Favor of a Preliminary Injunction.

#### A. Dyson Will Suffer Irreparable Harm Absent a Preliminary Injunction.

Dyson has made a clear showing of a likelihood of success on the merits with regard to both validity and infringement, thus entitling it as a matter of law to a presumption of immediate irreparable harm, which Maytag does not rebut. *Polymer Techs.* v. *Bridwell*, 103 F.3d 970, 973 (Fed. Cir. 1996); *Impax Labs, Inc.* v. *Aventis Pharm., Inc.*, 235 F. Supp. 2d 390, 395 (D. Del. 2002). Even apart from this presumption, Dyson has satisfied its burden of establishing irreparable injury.

In arguing otherwise, Maytag asserts that "Dyson's contentions of damages are totally speculative." Maytag Br. at 16. By this motion, Dyson does not seek an award of damages, but rather a preliminary injunction. As Jeffrey Hyman, Dyson's Vice President of Marketing for the United States, explained, Dyson will suffer severe injury, including the potentially irreversible loss of market share and the opportunity to reach mainstream U.S. consumers, if Maytag is permitted to continue selling its infringing Hoover Fusion vacuum cleaner. Hyman Aff. ¶¶ 14, 17, 23-26 (A216-218; A220-221). Indeed, Dyson's very future in the U.S. vacuum cleaner market, which it entered in October 2002, is at stake. *Id.* ¶¶ 7, 25-26 (A214; A220-221). Because this injury could "never fully [be] compensable in money," it constitutes irreparable injury, and a preliminary injunction is warranted. *Solarex Corp.* v. *Advanced Photovoltaic Sys., Inc.*, No. 93-229-JJF, 1995 WL 314742, at \*8 (D. Del. Jan. 6, 1995) (quoting *Atlas Powder Co.* v. *Ireco Chems.*, 773 F.2d 1230, 233 (Fed. Cir. 1985)); *see also A.W. Indus. Inc.* v. *Electronic Connector Serv. Inc.*, 46 U.S.P.Q.2d 1218, 1224 (S.D. Fla.

Rather than take issue with the substance of Mr. Hyman's affidavit, Maytag notes that Mr. Hyman has worked at Dyson for "less than a year." Maytag Br. at 16 n.5. This establishes nothing. Mr. Hyman offers considerably more detail and support in his affidavit than David Baker of Maytag does in his bare-boned, highly conclusory affidavit.

1997) ("These damages are not easily susceptible of measurement or quantification, and thus potential irreparable injury to Plaintiffs is present as to the patent infringement claim.").

Maytag also argues that lost "expansion" opportunities are not a proper basis for a preliminary injunction. Maytag Br. at 16-17. As an initial matter, the threat posed by the infringing product is far more serious than "curtailment of Dyson's expansion." *Id.* at 16. Although Dyson has been successful to date in the United States, that success "in no way guarantees future success." Hyman Aff. ¶ 12 (A215). Absent immediate judicial relief, Dyson's current efforts to penetrate the consumer mass market may well fail, causing its volume to stagnate and then fall, its market share to decline and its vacuum cleaners to be relegated to low-volume, niche status. *Id.* ¶¶ 14, 25-26 (A216-217 & A220-221). This threat is even more dire in view of Maytag's widely-recognized, decades-old "Hoover" brand. *See Pittway* v. *Black & Decker*, 667 F. Supp. 585, 592 (N.D. Ill. 1987).

Contrary to Maytag's assertion, many courts, including this Court, have found that the exact types of injury with which Dyson is threatened are sufficient to establish irreparable harm. *See*, *e.g.*, *Canon Computer Sys.*, *Inc.* v. *Nu-Kote Int'l*, *Inc.*, 134 F.3d 1085, 1090 (Fed. Cir. 1998) ("finding of potential irreparable harm" based on, among other things, "the potential loss of market share"); *Fisher-Price*, *Inc.* v. *Safety 1st*, *Inc.*, 279 F. Supp. 2d 526, 528 (D. Del. 2003) ("[A] legal remedy is inadequate to redress the loss in market share that Safety 1st's continuing infringing sales would cost Fisher-Price."); *Solarex*, 1995 WL 314742, at \*8 ("loss of existing market share, price erosion and lost market penetration

David Baker of Maytag wrongly equates Dyson's presence in certain mass-merchant stores with success in penetrating the consumer mass market. Baker Aff. ¶ 6-8 (MAPP071). Merely because Dyson's products appear on the shelves of mass-market retailers such as Wal-Mart and Target does not mean that the mainstream consumers that make up the mass market will purchase those products. If, as a result of the presence of Maytag's infringing product, Dyson's products simply sit on the shelves at Wal-Mart and Target, Dyson will not succeed in its efforts to penetrate the mass market.

and expansion opportunities" are "examples" of irreparable injury); see also Purdue Pharma L.P. v. Boehringer Ingelheim GmbH, 98 F. Supp. 2d 362, 398 (S.D.N.Y. 2000) (irreparable harm exists where plaintiff "could permanently lose its advantageous position in the . . . market"), aff'd, 237 F.3d 1359 (Fed. Cir. 2001); Henkel Corp. v. Coral, Inc., 754 F. Supp. 2d 1280, 1322-23 (N.D. III. 1991) (irreparable harm exists where plaintiff "will continue to suffer lost sales and market share and lost opportunities to expand its business"); Spalding & Evenflo Cos. v. Acushnet Co., 2 U.S.P.Q.2d 1070, 1071 (D. Mass. 1986) (irreparable harm exists where plaintiff has "lost 'significant' market penetration and expansion as well as pre-existing sales growth"). Maytag cites no authority to the contrary.

In an effort to distract the Court from the issues here, Maytag states that "there is no present intention by Hoover" to offer the Hoover Fusion to merchants other than Wal-Mart. Maytag Br. at 18; see also id. at 1 & 19 ("no present plans to otherwise market or distribute it"). This carefully worded statement of intention in no way minimizes the threat of injury to Dyson. "In any event, authorizing the wrongdoer to continue the wrong, only not at an increased rate, is in no realistic sense maintaining the status quo." Atlas Powder Co. v. Ireco Chems., 773 F.2d 1230, 1231 (Fed. Cir. 1985).

Further, in arguing that it is "quite capable of satisfying an award of damages," Maytag Br. at 18, Maytag misses the point entirely. Even if some injury to Dyson is compensable, absent a preliminary injunction, "there will be market effects that could never be measurable in monetary terms." *Pittway*, 667 F. Supp. at 592. Maytag is also wrong in asserting that "the fact that Dyson has licensed others under its patents" undermines Dyson's claim of irreparable injury. Maytag Br. at 18. This Court has rejected the argument "that the grant of licenses is incompatible with the right to exclude that is fundamental to every patent owner." *Johnson & Johnson Consumer Prods., Inc. v. Ormco Corp.*, Nos. 87-341-JJF, 87-547-JJF, 1988 WL 155634, at \*7 (D. Del. Sept. 29, 1988).

Lastly, Maytag does not dispute that Dyson did not delay in seeking a preliminary injunction to enforce its patents after the infringing Fusion vacuum cleaner began appearing in Wal-Mart stores. Nor does Maytag deny that the limited time remaining on two of the four patents-in-suit (both of which expire in the first half of 2006) supports the issuance of a preliminary injunction.

## B. The Balance of Harms Favors a Preliminary Injunction.

Maytag asserts—without any explanation or evidence—that "a preliminary injunction would irreparably injure Maytag's relationship with Wal-Mart, across all of its product lines, not just the Fusion vacuum cleaner." Maytag Br. at 19-20. It further argues, again without sufficient support, that an injunction would require a recall from approximately 3,000 Wal-Mart stores and would cause "a loss of profit." *Id.* at 20. Based on these assertions, Maytag contends that in balancing the equities, "the damage to Hoover, both tangible and intangible, would be near-devastating, while any damages to Dyson, which is well-entrenched in the U.S. market, and present in the broad range of retail channels, would likely be minimal." *Id.* These contentions do not withstand scrutiny. 8

Maytag is "among the top four major appliance companies in the North

American market, offering consumers a full line of washers, dryers, dishwashers,
refrigerators and ranges distributed through large and small retailers across the United States

Maytag offers no support for its bald assertion that "a preliminary injunction would irreparably injure Maytag's relationship with Wal-Mart." Maytag Br. at 19-20. To the extent that Maytag incurs costs in recalling the infringing product, that "harm is self-inflicted." *Henkel*, 754 F. Supp. at 1323. Nor should Maytag be heard to complain that it will lose profits on the sale of the infringing product. Maytag is not entitled to profit from its patent infringement.

The Federal Circuit's decision in *Illinois Tool Works, Inc.* v. *Grip-Pak, Inc.*, 906 F.2d 679 (Fed. Cir. 1990), provides Maytag with no assistance. *See* Maytag Br. at 19. That decision simply holds that the court should consider "the movant's showing of likelihood of success" in balancing the hardships. 906 F.2d at 683.

and Canada." Maytag Corp., 2004 Annual Report at 1 (2005). Vacuum cleaners thus are only a small part of Maytag's business, and the Fusion is just one model among the more than 60 models of Hoover vacuum cleaners that Maytag sells. *See* Dyson Opening Br. at 6-7, 37. In light of these undisputed facts, Maytag's claim that a preliminary injunction would cause it any substantial harm is not credible. This claim becomes even more farfetched when Maytag's recently announced merger with Whirlpool, a company with total revenue of \$13.2 billion in 2004, is considered. *See* Whirlpool Corp., 2004 Summary Annual Report at 19 (2005) (C60). A preliminary injunction applying only to this one vacuum cleaner product cannot significantly harm the combined entity, which will have combined annual revenues of nearly \$18 billion.

In contrast to Maytag, Dyson sells only vacuum cleaners, and it entered the United States market only recently. Hyman Aff. ¶¶ 7-8 (A214); Dyson Aff. ¶23 (A16). As a result, Maytag's assertions (Maytag Br. at 20) that Dyson "is well-entrenched in the U.S. market" and that its damages from the denial of this motion "would likely be minimal" are baseless and contradicted by the record facts. As Jeff Hyman explained in his affidavit:

If Dyson is required to wait a year or eighteen months until the conclusion of this litigation to obtain an injunction, it may be too late. By that time, Dyson will have lost its momentum in the U.S. market and failed in its effort to penetrate the mass market as a direct result of the presence of the Hoover Fusion in the marketplace. That failure may not be easily reversible.

Hyman Aff. ¶ 26 (A221).

#### C. A Preliminary Injunction Will Serve the Public Interest.

Maytag concedes that "there exists a public interest in protecting patent rights secured by valid patents." Maytag Br. at 20. Indeed, as this Court recently noted, "it is almost redundant to note the substantial interest in enforcing valid United States patents." *Fisher-Price*, 279 F. Supp. 2d at 528.

No countervailing harm to the public will result if the requested injunctive relief is granted. In arguing to the contrary, Maytag relies on its highly exaggerated assertion that "[t]he consuming public would be greatly harmed [if] denied access to Hoover's cyclonic vacuum cleaner." *Id.* at 21. This is simply not credible. There are many dozens of vacuum cleaner models available today, including more than 60 from Maytag alone. *See Rubbermaid Commercial Prods., Inc.* v. *Contico Int'l Inc.*, 836 F. Supp. 1247, 1263 (W.D. Va. 1993) ("[B]ecause the product at issue is, after all, one waste receptacle among many and not a wonder drug in short supply, the public will not be harmed significantly by its removal from the market."). In addition, vacuum cleaners "are not medically necessary items; nor do they possess any other exceptional characteristic or function such that their removal from the stream of commerce would harm the public." *Fisher-Price*, 279 F. Supp. 2d at 528-29.

#### **CONCLUSION**

Dyson's motion for a preliminary injunction should be granted.

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September 20, 2005

#### **CERTIFICATE OF SERVICE**

I, Karen E. Keller, hereby certify that on September 20, 2005, I caused to be electronically filed a true and correct copy of the foregoing document with the Clerk of the Court using CM/ECF, which will send notification that such filing is available for viewing and downloading to the following counsel of record:

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I further certify that on September 20, 2005, I caused a copy of the foregoing document to be served by hand delivery on the above-listed counsel of record and on the following in the manner indicated:

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